

# ON THE CIDELINES

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION PESTICIDE CONTROL PROGRAM NEWSLETTER

- IN THIS ISSUE -

Pesticide Use Permits
Pesticide Persistence in Alaska
Bed Bug Quiz

Protecting Water New IPM Requirements

Et02 vanuac <u>\tanak.us\eh/pest\</u> January 2013

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### **Pesticide-Use Permits**

As of March, 2013, regulations regarding pesticide permits changed.

Permits are now required under three circumstances:

- AQUATIC Any application to water or wetlands
- AERIAL Any application by aircraft
- 3. PUBLIC PROJECTS ON PRIVATE PROPERTY application to more than one private property by a government agency (state, borough, or city)

Contact the Pesticide Control Program for more information about permits.





### Water is Everywhere!

There are many creeks, lakes, and swamps covering Alaska. Special care must be taken to ensure pesticides do not impact nearby water bodies.

Applicators must consider any nearby water bodies or wetlands when choosing application methods, treatment areas, and products.

If any water bodies are located nearby, applicators should consider using spot applications or other methods that allow precise placement of products.

The topography or way the land slopes, as well as soil types, vegetation, and other factors that will influence drainage should be considered when assessing an area to be treated. All of the items can affect whether a pesticide will migrate far enough to impact nearby water.

Any application to water or wetlands requires a special pesticide-use permit. However, applicators who will be treating land areas that are near water may wish to take additional precautions, such as choosing pesticide products that are approved for aquatic application.

## Pesticide Persistence in Alaska

Pesticides <u>persist</u>, or remain active in the environment until they break down, also known as <u>degradation</u>.

Pesticides break down and become inactive in several ways. They may be broken down into component parts by;

- sunlight (photodegradation);
- micro-organisms such as bacteria and fungus (<u>microbial</u> <u>degradation</u>);
- natural chemical reactions in soil such as oxidation, reduction, or hydrolysis (<u>chemical degradation</u>); or
- taken up by plants and metabolized or neutralized (biological degradation).

Many of the processes which break pesticides down will slow or cease during the long winter season in Alaska. As a result, some pesticides may persist in the environment longer than expected.



#### Persistence Continued...

This is especially true for products that are applied in late summer or fall, and for products which normally take a long time to break down anyway.

Applicators must consider extended persistence when choosing products and determining when to apply pesticides.



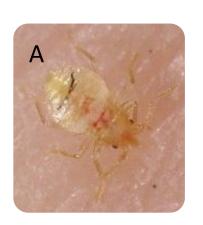
### **IPM** Requirements

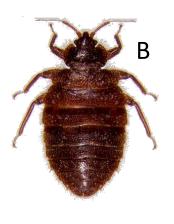
As of March, 2013, new regulations began, which require Integrated Pest Management Plans for application of pesticides to more than one acre of state owned or leased land.

In addition to development of an IPM Plan, there are also requirements to publish a public notice, notify DEC and nearby drinking water systems, and prepare reports about pesticide use.

Check the Pesticide Control Program website, or contact us for more information about new IPM requirements.

**Quiz**Which of these are pictures of bed bugs?

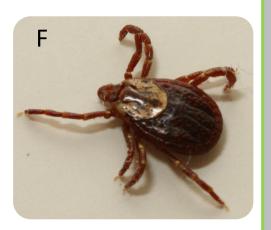




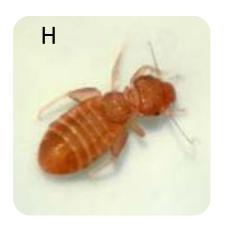














C = fed adult bed bug F = dog tick I = immature cockroach B = bat bug E = African bat bug H = book louse Agmyn Bubed bed nymph D = fed bed bug bed bed bug D = 5 annfed bult bed bug